

# **PHENIX WEEKLY PLANNING**

10/20/06

Don Lynch

# PHENIX Shutdown Overview

Task_Name	Start_Date	Finish_Date
PHENIX Shutdown '06	5/1/2006	12/8/2006
Pre Shutdown Tasks	5/1/2006	DONE
End of Run 6	6/27/2006	DONE
Shutdown Preparations	6/27/2006	DONE
Detector Upgrades	7/19/2006	11/30/2006
Planned electrical power outage	7/24/2006	DONE
Subsystem maint/repair tasks	7/19/2006	10/31/2006
Building and infrastructure tasks	5/1/2006	10/31/2006
E carriage roll in & setup	10/30/2006	11/17/2006
RHIC Cooldown Begins	12/1/2006	12/1/2006
Start Flammable Gas/Watch Shifts	12/5/2006	12/5/2006
Run Prep	11/20/2006	12/31/2006
Shutdown Concluded Start Physics Run	1/1/2007	1/1/2007

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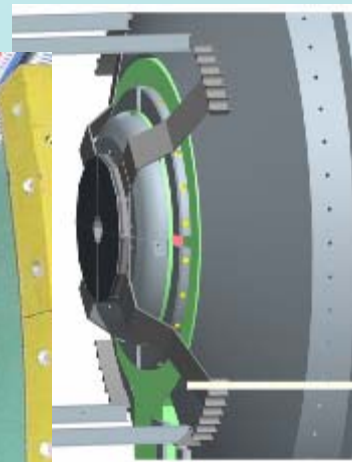
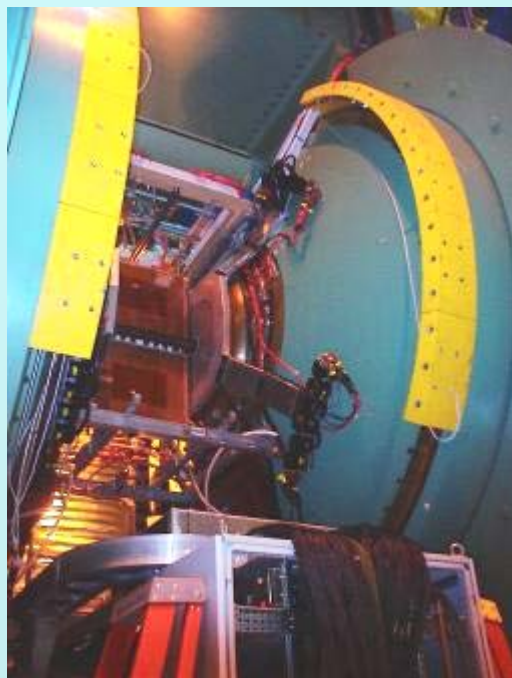
- Mechanical Installation Complete
- Cables Run
- Rack Modifications complete
- Gas supply control system (mixing house) in progress, nearly complete
- Electronics installation in progress
- Testing and commissioning to be completed



# RXNP

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- Mechanical installation Complete
- Cables run
- Rack plumbing, power Complete
- Electronics installation in progress
- Testing and commissioning to be completed
- LED Box installation next week

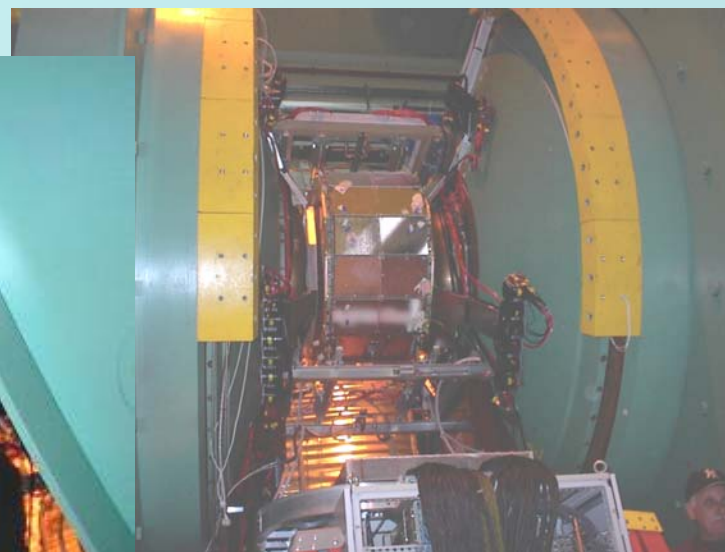


10/20/06

Weekly Planning Meeting



- Mechanical Installation HBD West & East Complete
- HBD West Cables Run
- Testing and commissioning to be completed
- HBD East survey & cabling next week
- Cooling systems to be installed
- Bakeout heaters ready to go
- Gas Hutch renovation ongoing
- Gas flow control racks nearly ready



# HBD (Hadron Blow Drier)

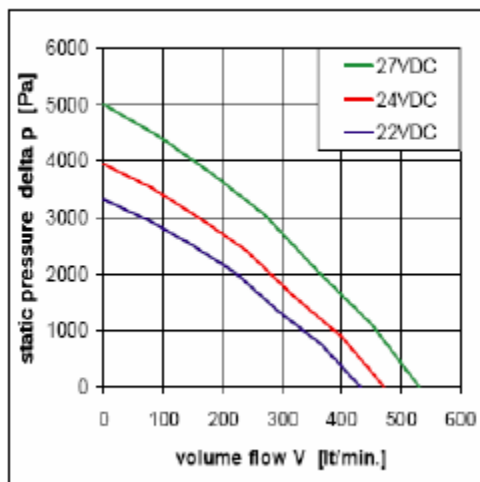
## Electronics Cooling



### Still Needed for Approval to Operate:

- Where will fan(s) be mounted? - CM base "cubby hole" fan model and specs to be forwarded to Safety
- Written design and operation description and- To be forwarded to Safety
- Order for 5 blowers & drivers (4 +1 spare) is in the works

U51DX-024KK-5 24VDC



Blower requirements:

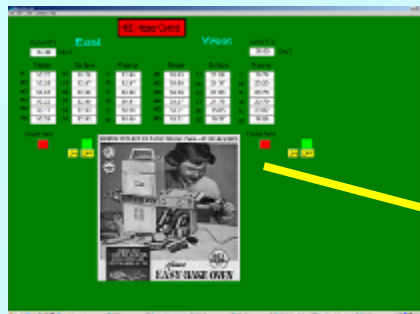
5 cfm (142 l/min)

@ 5 in WC (1245 Pa)

# HBD "EBO" Heaters

## Needed for Approval to Operate:

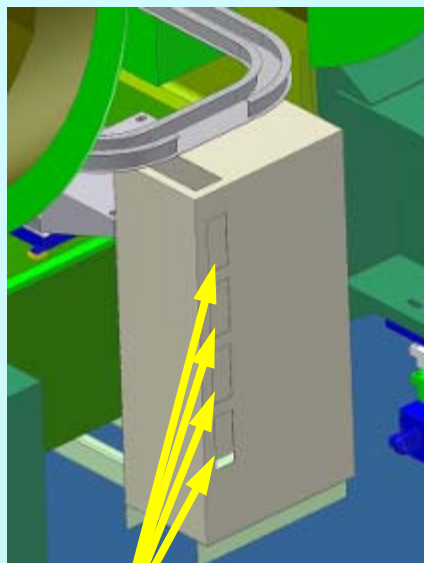
- Report detailing design and operation-forwarded to Safety awaiting comments



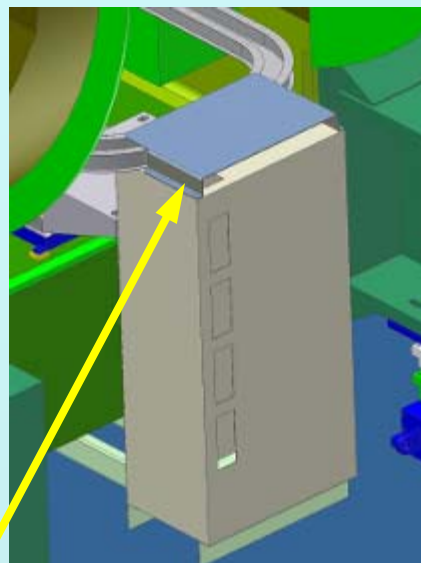
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# HBD Signal Rack

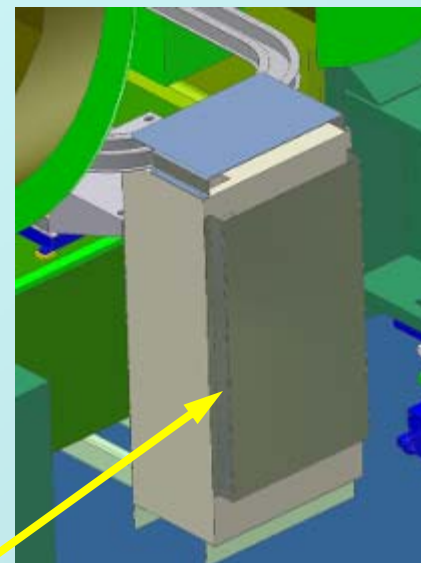
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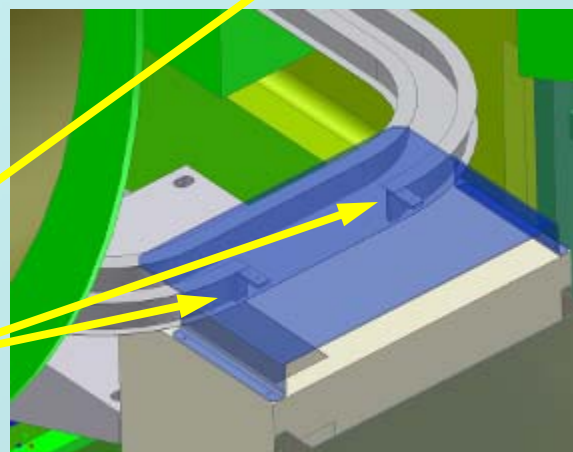
Cutouts Done



Cable Cover waiting for material



"Chimney" Done



Mounting Brackets Done



# Remaining Schedule

	Start	Complete
<b>TOF West</b>		
Electrical, modify/upgrade rack	Done	Done
Commissioning	in progress	10/31/06
<b>RXNP</b>		
Electrical, rack integration: water & power	Done	Done
Commissioning	in progress	10/31/06
<b>HBD</b>		
Electrical cables, rack integration: water & power	in progress	10/13/06
Gas Plumbing	in progress	10/13/06
East pre-survey	Done	Done
East mechanical installation (incl. final survey)	10/19/06	10/24/06
East cable trays	10/20/06	10/25/06
HBD preamp cooling system	9/5/06	11/1/06
HBD drying heater system	Done	Done
Commissioning	9/25/06	11/30/06

# Remaining Schedule

(cont'd)

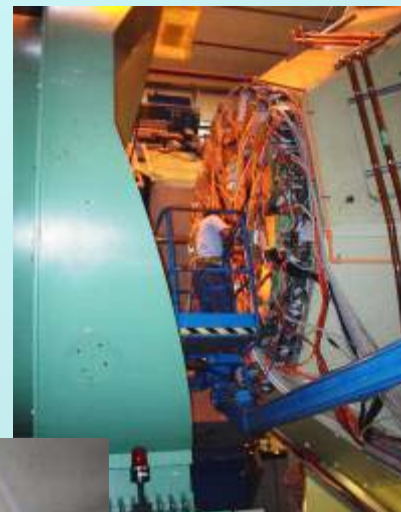
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	Start	Complete
<b>MPC North</b>		
Mechanical installation	Done	Done
Electrical, modify/upgrade rack	Done	Done
Commissioning	10/12/06	10/31/06
<b>PC HV module and cable maintenance</b>	10/24/06	10/31/06
<b>TEC maintenance &amp; Repairs</b>	in progress	10/31/06
<b>MuID survey</b>	10/20/06	10/27/06
<b>MuID commissioning</b>	11/22/06	11/29/06

# MPC North

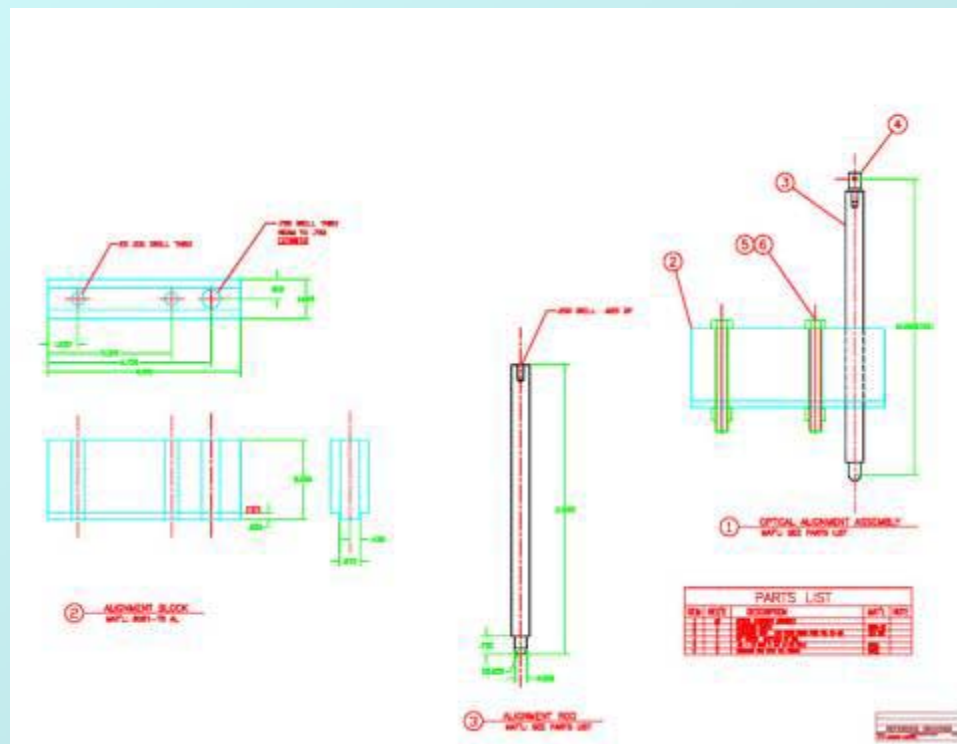
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- Mechanical Installation Complete
- Cables and Rack installed
- Testing and commissioning in progress
- CM moved to run position...no more access to the crystals until Shutdown 2007



# Subsystem Maintenance & Repairs

- PC HV module/cable maintenance later this month
- TEC upgrades on going
- MuID survey/commissioning next month





CAD/RHIC PHENIX infrastucture related  
mechanical and electrical support

Roof leak repairs

?

MuID survey

?

EMCal Survey

?

1008-wide Door latch repairs for security

?

Counting House Floor cleaning

*Requested*

Mixing house ramp sand painting

*requested*

EC and Shield wall C-A support

*10/30-12/1/2006*

LN2 Tank Stencilling

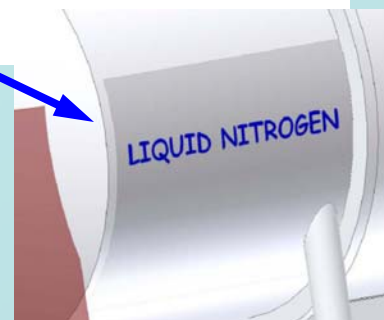
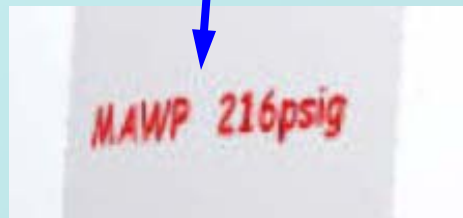
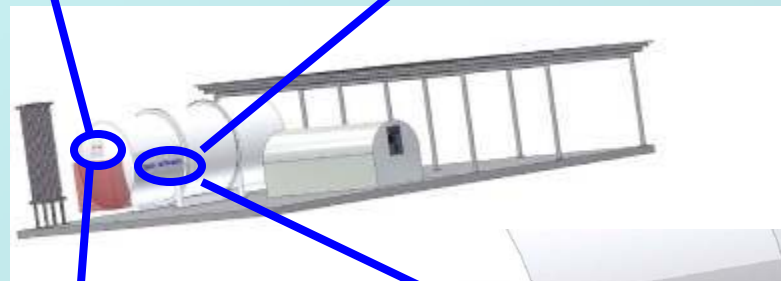
*Done*

# Infrastructure Work

Stenciling on LN2 Tank  
Done

# Infrastructure Work

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# Remaining Schedule (cont'd)

	Start	Complete
<b>East carriage roll in &amp; setup</b>		
Prepare IR & EC for move to IR/move cart, manlifts, collars	23-Oct	31-Oct
EC Roll in	1-Nov	3-Nov
Connect EC services	6-Nov	10-Nov
Install EC Ladder	13-Nov	14-Nov
Install EC rear access & ext.	15-Nov	17-Nov
<b>Move MMS full North/Install beam pipe collar</b>	20-Nov	22-Nov
<b>Rebuild Rolling door</b>	27-Nov	30-Nov
<b>Close rolling door</b>	30-Nov	30-Nov
<b>RHIC Cooldown Begins</b>	1-Dec	1-Dec
<b>Pink Sheeting &amp; Blue Sheeting</b>	13-Nov	1-Dec
<b>Start Flammable Gas Flow</b>	5-Dec	18-Dec
<b>All Up Commissioning</b>	5-Dec	18-Dec
<b>Beam in yellow ring</b>	18-Dec	18-Dec
<b>Beam in blue ring</b>	25-Jan	25-Jan
<b>RHIC beam conditioning</b>	25-Jan	31-Dec
<b>Shutdown Concluded/Start of Physics Run</b>	1-Jan	1-Jan



# SEU Test

## John Lajoie Iowa State

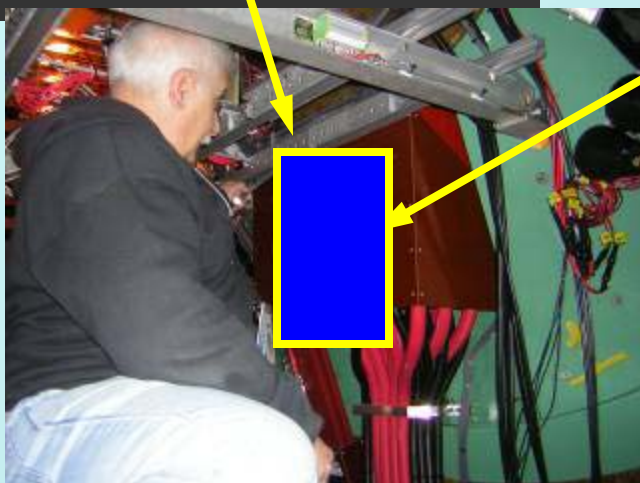
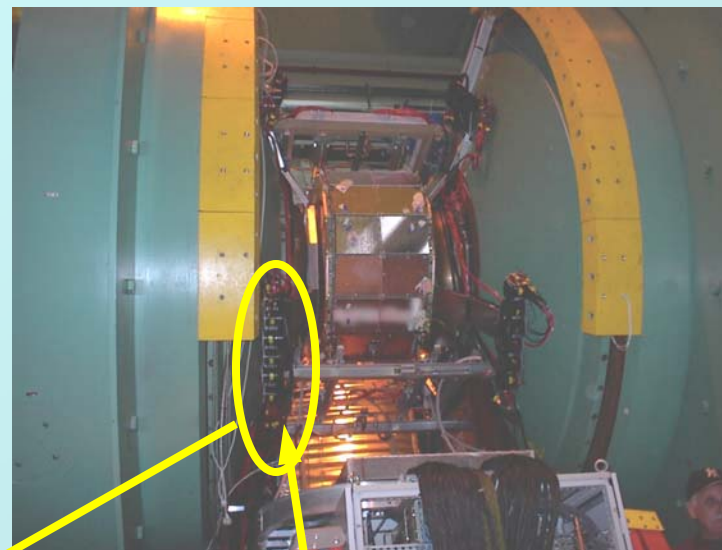
### Experimental Impact Statement

- The box dimensions are: 17" x 10" x 3.5".
- The only services required by the box in order to function are AC power and a Cat5 cable connected to the USB interface.
- The FPGA devices will be programmed and monitored over an external USB connection, which is run over a USB -> Cat5 extender box. This extender has a maximum range of 150 feet of Cat5 cable, which should be sufficient to reach from the PHENIX IR to the rack room, where it will connect to a laptop containing the analysis and configuration software. (The laptop will require network access, and will comply fully with all BNL cybersecurity requirements.)
- Because SEU events are relatively rare, it would be best to expose the apparatus to as high a particle flux as possible. However, the box represents a substantial amount of material and it would be unacceptable to place the box within the acceptance of the central arms. Placement within one of the muon arms, near or on the central magnet pole, would be optimal.



# SEU Test John Lajoie Iowa State

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Current proposed location for test box. To be oriented with long side of box perpendicular to ebeam orbit direction (z).

# PC HV work Request

- New HV modules on EC & WC,
- Cables and connectors needed.
- Need cables run north to south on EC.
- Manlift needed
- PC guys to be here 10/24 work to be completed by 10/27

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# Next Week

- HBD East final survey
- HBD East cabling & electronics installations
- HBD, TOF W, RXNP, MPC N electronics commissioning
- MuID survey ?
- HBD signal rack chimney
- HBD & TOF W mixing house gas control systems
- TEC repairs

# Where To Find PHENIX Technical Info



Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:

[http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL\\_SSint-page.htm](http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm)